REMARKS

Applicants have carefully reviewed this Application in light of the Final Office Action mailed May 5, 2004 and the Advisory Action mailed August 4, 2004. Claims 1-8, 10-19, and 23-26 are pending in this Application. Claims 1, 4, 8, 12, 15, 17, and 23-25 stand rejected under 35 U.S.C. §102(e) and Claims 12, 3, 5-7, 10, 11, 13, 14, 16, 18, 19, and 26 stand rejected under 35 U.S.C. §103(a). Applicants have amended Claims 1, 4, 12 and 23 to further clarify various features of Applicants' invention. In addition, Applicants have amended Claim 26 to correct a typographical error. Applicants respectfully request reconsideration and favorable action in this case.

Independent Claims 1, 12 and 23 are Allowable over *Gemmink*.

Claims 1, 4, 8, 12, 15, 17, and 23-25 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,309,781 issued to Jan W. Gemmink et al. ("*Gemmink*").

Amended Claim 1 recites:

> A method for fabricating a damage resistant photomask, the method comprising:
> forming a photomask pattern including a plurality of features on a substrate, the features formed of an optical absorber; and
> forming a transparent, protective coating on and in contact with the photomask pattern, the transparent, protective coating operable to prevent the features from being damaged by electrostatic discharge.

Gemmink does not disclose, teach, or suggest at least "forming a transparent, protective coating on and in contact with the photomask pattern." In fact, *Gemmink* teaches directly away from forming a coating on and in contact with a photomask pattern.

Gemmink discloses a photomask 1 comprising a base plate 2. (col. 2, lines 65-66; Fig. 1). A mask pattern 6 is formed in a layer of mask material 4 provided on a first side 3 of the base plate 2. (col. 3, lines 2-9; Fig. 1). The photomask 1 is enveloped in a protective layer 9. (col. 3, lines 19-20; Fig. 1). According to the Examiner, this protective layer 9 can be equated with the "transparent, protective coating" recited in Claim 1. (Final Office Action, page 3). However, *Gemmink* explicitly states that "[o]n the first side 3 of the base plate 2, the

protective layer 9 is provided in a substantially homogeneous thickness, at a distance from the base plate 2 such that the protective layer 9 remains free of the mask pattern 6 to be imaged." (col. 3, lines 29-32; Fig. 1). As clearly shown in Figure 1 of *Gemmink*, protective layer 9 is not a coating formed in contact with pattern 6, but rather a protective film deliberately held away from pattern 6. Thus, even assuming for the sake of argument that protective layer 9 of *Gemmink* could be equated with the "protective coating" of Claim 1 (which Applicants do not concede), *Gemmink* teaches directly away from "forming a transparent, protective coating on and in contact with the photomask pattern," as recited in Claim 1.

Applicants note that the feature of forming the protective coating "on and in contact with the photomask pattern" (as recited in Claim 1), as opposed to "at a distance from" the photomask pattern (as disclosed by *Gemmink*) provides technical advantages, as discussed in the Applicants' specification. For example, as discussed in the Applicants' specification, many or all of the features of a typical photomask are separated from each other by air, which may lead to electrostatic discharges between features. (Applicants' specification, page 14, lines 7-24). Forming a protective coating on and in contact with the photomask pattern provides a physical layer (rather than air) separating various features of the photomask, thus preventing electrostatic discharges between features. (Applicants' specification, page 14, lines 12-24). The protective layer 9 of *Gemmink* does not provide this advantage of preventing electrostatic discharges between features; rather, protective layer 9 of *Gemmink* is designed to create a Faraday cage to prevent electrostatic discharges between the photomask 1 and outside structures. (*Gemmink*, col. 3, lines 19-22).

For at least these reasons, *Gemmink* fails to disclose, teach, or suggest all of the limitations recited in Claim 1. Therefore, Applicants respectfully request reconsideration and allowance of Claim 1, together with Claims 2-8 and 10-11 that depend therefrom. In addition, for at least the reasons stated with regard to Claim 1, Applicants respectfully request reconsideration and allowance of independent Claims 12 and 23, together with Claims 13-19 that depend from Claim 12 and Claims 24-26 that depend from Claim 23.

Claims 2, 3, 5-7, 10, 11, 13, 14, 16, 19 and 26 are Allowable.

Claims 2, 3, 5-7, 10, 11, 13, 14, 16, 19 and 26 stand rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over *Gemmink* in view of U.S. Patent No. 6,261,725 issued to San-De Tzu et al. ("*Tzu*"). In addition to being dependent on Claims 1, 12 and 23, which Applicants have shown above to be allowable, Claims 2, 3, 5-7, 10, 11, 13, 14, 16, 19 and 26 contain further patentable distinctions over the prior art.

For example, dependent Claim 26 recites:

> The photomask of Claim 23, further comprising:
> a trench formed in the substrate proximate at least one of the clear areas, the trench including a bottom and at least one wall; and
> the protective layer formed in the trench.

The proposed *Gemmink-Tzu* combination does not disclose, teach, or suggest these limitations. For example, neither *Gemmink* nor *Tzu* discloses a "protective layer formed in the trench [formed in a photomask substrate]." As discussed above, *Gemmink* discloses a protective layer 9 located at a distance from the photomask pattern 6. (*Gemmink*, col. 3, lines 29-32; Fig. 1). *Tzu* discloses a substrate 10 in which a pattern 12 has been engraved. (col. 4, lines 63-64; Figs. 4-5). A phase shift layer 14 is formed in a pattern 16 over the substrate 10. (col. 4, lines 65-66; Figs. 4-5). According to the Examiner, the phase shift layer 14 disclosed by *Tzu* can be equated with the "transparent, protective coating" recited in Claim 26. (Final Office Action, page 5). However, as clearly shown in Figures 4-7 of *Tzu*, the phase shift layer 14 (or 24) does not extend in the trench (i.e., pattern 12) formed in the substrate 10. Rather, phase shift layer 14 (and 24) includes an opening which matches the trench (i.e., pattern 12) formed in the substrate 10 (see Figs. 4-7). Thus, even assuming for the sake of argument that the phase shift layer 14 of *Tzu* could be equated with the "protective coating" of Claim 26 (which Applicants do not concede), *Tzu* fails to disclose, teach, or suggest - and in fact teaches away from - a "protective layer formed in the trench [formed in a photomask substrate]," as recited in Claim 26. For at least these reasons, the proposed *Gemmink-Tzu* combination does not disclose, teach, or suggest all of the limitations of Claim 26.

In addition, Applicants have amended dependent Claim 4 to include similar limitations. Thus, in addition to being dependent on Claim 1, which Applicants have shown above to be allowable, Claim 4 contain further patentable distinctions over the prior art.

Independent Claims 1, 12 and 23 are Allowable over *Tzu*.

Although the Examiner has not rejected independent Claims 1, 12 or 23 based on *Tzu*, Applicants respectfully submit that such a rejection would be inappropriate at least because *Tzu* does not disclose, teach, or suggest each and every limitation of Claims 1, 12 or 23.

For example, with regard to Claim 1, *Tzu* does not disclose, teach, or suggest "forming a transparent, protective coating on and in contact with the photomask pattern, the transparent, protective coating operable to prevent the features from being damaged by electrostatic discharge," as recited in Claim 1. The phase shift layer 14 disclosed by *Tzu* does not cover significant portions of the pattern 12 in the substrate 10. (see, e.g., Figs. 4-5). For example, as discussed above, *Tzu*'s phase shift layer 14 does not extend into a trench formed in the substrate 10, but rather includes an opening which matches the trench formed in the substrate 10 (see Figs. 4-5). Thus, *Tzu*'s phase shift layer 14 does not "prevent the features from being damaged by electrostatic discharge," as recited in Claim 1, which is an important feature of Applicants' invention, as discussed above. For at least these reasons, Applicants submit that any rejection of Claims 1, 12 or 23 based on *Tzu* would be inappropriate.

CONCLUSION

Applicants appreciate the Examiner's careful review of the application. Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. For the foregoing reasons, Applicants respectfully request reconsideration of the rejections and full allowance of Claims 1-8, 10-19 and 23-26, as amended.

Applicants enclose a Request for Continued Examination (RCE) Transmittal along with a check in the amount of $770.00 for the RCE fee required under 37 C.F.R. 1.17(e). Applicants also enclose a Petition for Extension of Time for one-month along with a check in the amount of $110.00 for the filing fee. Applicants believe there are no additional fees due at this time; however, the Commissioner is hereby authorized to charge any fees to or credit any overpayments Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2581.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorney for Applicants

Paula D. Heyman
Reg. No. 48,363

Date: Sept 3, 2004

SEND CORRESPONDENCE TO:
Baker Botts L.L.P.
CUSTOMER ACCOUNT NO. **31625**
512.322.2581
512.322.8328 (fax)